Monetary Policy in the Dynamic Model

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<u>Example of divine Beveridge-Wicksell model.</u>

Dynamic model of slack.

☑ divine : inflation is exogenous so
Fed only needs to reach
full employment to maximize
welfare.

☑ Beveridge . dynamic model has a
Beveridge curve (~ AS)

$$u(\theta) = \frac{\lambda}{\lambda + f(\theta)}$$

☑ Wicksell . AD curve is determined / governed
by nominal interest rate

$$y^d = \left[\frac{\delta - \overset{\text{discount rate}}{\textcircled{i}} + \pi}{\sigma'(0)} \right] \frac{1}{[1 + T(\theta)]^{\epsilon - 1}} \overset{\text{shape probability}}{\epsilon}$$

↑
MU wealth

↳ dynamic model is DBW model
↳ formula in sufficient statistics applies to
model.

θ

AD(c)

ZLB not binding

FFR ~~~~ ↓

AS

$\theta^* = 1$

stimulate economy

u^*

$$\text{ZLB} \quad y = \left[\frac{\delta + \pi}{\sigma(0)}\right]^{\xi} \frac{1}{(1+\tau(0))^{\xi-1}}$$

AD(0)

$\theta^{ZLB} < \theta^*$

AD(c*)

- hyperbolic Beveridge curve
- $\rho = 1$

$\theta < \theta^*$

L

idle capacity ∝ u

AD(0) ZLB no binding (Great Recession)

$u > u^*$

y y^* u